

REMARKS

Claims 1, 2, 4, 6, 7, 9-17, 19, 20, and 22-28 are pending.

Reconsideration of the application is respectfully requested for the following reasons.

I. The Rejection under 35 USC § 102(e)

In the Office Action, claims 1-3, 11, 12, and 15 were rejected for being anticipated by the Hiramatsu patent. This rejection is traversed for the following reasons.

The Hiramatsu patent discloses a data transmission system having two antennas. As long as reception signal quality is above a predetermined level, data will continue to be transmitted through the first antenna. However, when the reception signal quality falls below the predetermined level, the second antenna is used to transmit subsequent data.

However, the Hiramatsu does not disclose many of the steps of the method recited in amended claim 1. For example, claim 1 recites transmitting a data block through a first one of a plurality of sequentially selected antennas. Hiramatsu does not disclose sequentially selecting a plurality of antennas for purposes of transmitting data. Rather, Hiramatsu will continue to use the same antenna to transmit consecutive data blocks until reception signal quality falls below a predetermined level.

Further, claim 1 recites receiving a first signal indicating that an error occurred during transmission or reception of the data block. Hiramatsu does not disclose this step, i.e., Hiramatsu measures reception signal quality (e.g., signal-to-noise ratio, RSSI, noise power, etc.),

but this measured signal quality does not provide an indication of whether an error occurred during the transmission or reception of data such as, for example, a NACK signal.

Further, claim 1 recites interrupting sequential selection of the plurality of antennas to select a second one of the plurality of antennas in response to the first error signal, and then retransmitting the data block through the second one of the plurality of antennas. The Hiramatsu patent does not disclose these steps, i.e., Hiramatsu does not sequentially select its antennas but rather changes antennas only when reception signal quality falls below a predetermined level.

Moreover, Hiramatsu does not disclose retransmitting a previously transmitted data block (which was received or transmitted in error) through an antenna different from the one used to originally transmit the data block. Rather, Hiramatsu merely discloses transmitting future data through another antenna.

Because the Hiramatsu patent does not disclose all the features of amended claim 1, it is respectfully submitted that Hiramatsu cannot anticipate this claim or any of its dependent claims.

Claim 3 separately recites that the first error signal of claim 1 “indicates whether a receiver correctly received the data transmitted through the first one of the plurality of antennas.” Hiramatsu does not disclose a first error signal of this type, i.e., the reception signal quality measured by Hiramatsu only indicates signal-to-noise ratio, RSSI, noise power, etc., not whether a data block was actually correctly received.

II. The Rejection under 35 USC § 103(a)

Claims 4-10, 16-24, and 27-29 were rejected for being obvious in view of a Hiramatsu-Eastmond combination. This rejection is traversed for the following reasons.

In order for claims 4-10 to be obvious, the Eastmond patent must teach or suggest the features of base claim 1 missing from the Hiramatsu patent. The Eastmond patent discloses receiving a NACK signal indicating that data transmitted in a mobile communication system was not successfully received or has an error, and retransmitting that data.

However, the Eastmond patent does not teach or suggest many of the features of amended claim 1 missing from Hiramatsu, including “transmitting a data block through a first one of a plurality of sequentially selected antennas” and “interrupting sequential selection of the plurality of antennas to select a second one of the plurality of antennas in response to the first error signal.” Eastmond also fails to teach or suggest “retransmitting the data block through the second one of the plurality of antennas.” Absent a teaching or suggestion of these features, it is respectfully submitted that an Hiramatsu-Eastmond combination cannot render claim 1 or any of its dependent claims obvious.

Dependent claim 6 recites the additional step of “transmitting a consecutive sequence of additional data blocks through the second one of the plurality of antennas.” This step comes after and represents an interruption or modification of a sequential selection of the antennas. (See, for example, Figure 7 of the application drawings for support). These features are not taught or suggested by the cited references, whether taken alone or in combination.

Claim 7 recites the additional steps of “receiving a second error signal indicating that one of the additional data blocks was transmitted or received in error; and interrupting the consecutive transmission of the additional data blocks in response to the second error signal; and transmitting one or more subsequent data blocks through a third one of the plurality of antennas, wherein the third one of the plurality of antennas is same is the first antenna or is different from the first antenna and the second antenna.” (See, for example, Figure 7 of the application drawings for support). These features are not taught or suggested by the cited references, whether taken alone or in combination.

Claim 9 recites that “the data block is retransmitted in consecutive sequence with an additional data block initially transmitted by the second one of the plurality of antennas.” (See, for example, Figure 5 of the application drawings for support). These features are not taught or suggested by the cited references, whether taken alone or in combination.

Claim 10 recites the additional steps of “resuming sequential selection of the plurality of antennas after the data block is retransmitted through the second one of the plurality of antennas” and “transmitting additional data blocks through the sequentially selected antennas.” (See, for example, Figure 5 of the application drawings for support). These features are not taught or suggested by the cited references, whether taken alone or in combination.

Claim 16 recites transmitting a data block to a receiver through a first antenna, checking a first response signal of the receiver; and if the first response signal is a retransmission request signal, retransmitting the data block through a second antenna. Hiramatsu does not teach or

suggest these features, i.e., Hiramatsu does not change antennas in response to the type of error signal recited in claim 16. And, while Eastmond discloses retransmitting data in response to a NACK signal, Eastmond fails to teach or suggest changing transmission antennas in response to the NACK signal for purposes of retransmitting data.

Based on these differences, it is respectfully submitted that claim 16 and its dependent claims are allowable over a Hiramatsu-Eastmond combination.

Dependent claims 17, 20, 22-28 recite features similar to those that patentably distinguish the dependent claims of claim 1 from the Hiramatsu and Eastmond patents. Accordingly, it is submitted that claims 17, 20, and 22-28 are allowable, not only by virtue of their dependency from claim 16 but also based on the features separately recited therein.

In view of the foregoing amendments and remarks, it is respectfully submitted that the application is in condition for allowance. Favorable consideration and timely allowance of the application is respectfully requested.

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Docket No. P-0609

Amdt. dated November 6, 2007

Reply to Office Action of August 6, 2007

To the extent necessary, a petition for an extension of time under 37 CFR § 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this, concurrent and future replies, including extension of time fees, to Deposit Account 16-0607 and please credit any excess fees to such deposit account.

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